

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in the application:

1. (Currently Amended) A method comprising:

receiving one or more lists of available resources from one or more computer devices;

receiving, from an application process, a document specifying a communication protocol and a communication channel;

reading the document;

accessing properties information reflecting addresses of the computer devices;

determining whether the communication channel requires communication with at least one of the computer devices;

instantiating, based on the list of available resources for the required computer devices, the communication channel with the application process using the communication protocol; and

~~sending communications to~~ communicating with the application process using the communication protocol through the communication channel; ~~and~~

~~receiving communications from the application process using the communication protocol through the communication channel.~~

2. (Original) The method of claim 1 further comprising:

sending a request for data describing the application process and its requirements; and

receiving data describing the application process and its requirements.

3. (Original) The method of claim 2 wherein the data comprises process identification or degree of consumption of a resource by the application process.

4. (Original) The method of claim 3 wherein the data further comprises a definition of the resource.

5. (Original) The method of claim 3 wherein the resource comprises one or more of a central processing unit, memory, socket bindings, memory storage space, and communication bandwidth.

6. (Currently Amended) The method of claim 1 wherein communicating ~~sending communications~~ comprises sending a command to the application process to perform an action.

7. (Original) The method of claim 6 wherein the action is one of start, stop, wait, resume, and change priority.

8. (Original) The method of claim 1 wherein the document further specifies one or more commands that the application process is capable of receiving and executing.

9. (Withdrawn) A system comprising:
- a computer system with a processor and a memory;
- a service handling at least locating, reserving, allocating, monitoring, and deallocating one or more computational resources on the computer system for an application program, the service configured to read a document specifying how to interface with the application program; and
- the application program configured to execute on the computer system as an application process managed by the service.
10. (Withdrawn) The system of claim 9 wherein the service is further configured to instantiate a communications channel with the application program.
11. (Withdrawn) The system of claim 9 wherein interfacing with the application program comprises sending a request for data describing the application process and receiving data describing the application process.
12. (Withdrawn) The system of claim 11 wherein the data comprises process identification or degree of consumption of a resource by the application process.
13. (Withdrawn) The system of claim 12 wherein the data further comprises a definition of the resource.

14. (Withdrawn) The system of claim 12 wherein the resource comprises one or more of the processor, the memory, socket bindings, memory storage space, and communication bandwidth.

15. (Withdrawn) The system of claim 9 wherein specifying how to interface comprises sending a command to the application process to perform an action.

16. (Withdrawn) The system of claim 15 wherein the action is one of start, stop, wait, resume, and change priority.

17. (Withdrawn) The system of claim 9 wherein the document further specifies one or more commands that the application process is capable of receiving.

18. (Withdrawn) The system of claim 9 further comprising a second application program configured to execute on the computer system as a process managed by the grid manager, wherein the second service is configured to read a second document specifying how to interface with the second application program.

19. (Currently Amended) A computer-readable medium that stores a set of instructions which, when executed, performs a method comprising:

receiving one or more lists of available resources from one or more computer devices;

receiving, from an application process, a document specifying a communication protocol and a communication channel;

reading the document;

accessing properties information reflecting addresses of the computer devices;

determining whether the communication channel requires communication with at least one of the computer devices;

instantiating, based on the list of available resources for the required computer devices, the communication channel with the application process using the communication protocol; and

~~sending communications to~~ communicating with the application process using the communication protocol through the communication channel; ~~and~~

~~receiving communications from the application process using the communication protocol through the communication channel.~~

20. (Previously Presented) The computer-readable medium of claim 19, wherein the method further comprises:

sending a request for data describing the application process and its requirements; and

receiving data describing the application process and its requirements.

21. (Currently Amended) A system, comprising:

a memory; and

a processor, wherein the processor and the memory:

receive one or more lists of available resources from one or more

computer devices;

receive, from an application process, a document specifying a
communication protocol and a communication channel;

read the document;

access properties information reflecting addresses of the computer
devices;

determine whether the communication channel requires communication
with at least one of the computer devices;

instantiate, based on the list of available resources for the required
computer devices, the communication channel with the application process using the
communication protocol; and

~~send communications to~~ communicate with the application process using
the communication protocol through the communication channel; ~~and~~

~~receive communications from the application process using the~~
~~communication protocol through the communication channel.~~

22. (Previously Presented) The system of claim 21, wherein the processor
and the memory:
send a request for data describing the application process and its requirements;
and
receive data describing the application process and its requirements.